ASARCO
GRUPO MEXICO

October 30, 2018

CERTIFIED MAIL: 7017 3380 0000 7247 5402
RETURN RECEIPT REQUESTED
Chief, Air and TRI Section
Enforcement Division
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street
San Francisco, California 94105

CERTIFIED MAIL: 7017 33800000 7247 5419
RETURN RECEIPT REQUESTED
Director, Air Enforcement Division
Office of Civil Enforcement
U.S. EPA Headquarters, MC 2242A
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

CERTIFIED MAIL: 7017 3380 0000 7247 5426
RETURN RECEIPT REQUESTED
Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ No. 90-5-2-1-10459

Re: United States v. Asarco
Consent Decree No. CV-15-02206-PHX-DLR
Quarterly Report for the Third Quarter of 2018

Presented below is Asarco's quarterly report for the third quarter of 2018, as required by paragraphs 55 and B.36 of the above-referenced consent decree. Consent Decree reporting requirements are in bold italics followed by the required report information.

Paragraph 55.a.i: Emissions and monitoring data and corrective action records, including the following:

(1) The results of any performance tests that were required by the Consent Decree;

Smelter Method 5 Performance Tests:

Method 5 performance testing was conducted during the month of September 2018, however, the test reports have not been finalized as of September 30, 2018.

Smelter Method 5B Performance Tests:

Method 5B performance testing was conducted at the acid plant during the month of September 2018, however, the test reports have not been finalized as of September 30, 2018.

Concentrator Method 5 Performance Tests:

No Method 5 performance testing was conducted during the third quarter of 2018.

Flash Furnace, Converter, and Anode Buildings Opacity Performance Tests:

N/A. The due date for the submittal of a performance test plan per 40 C.F.R. § 63.1450(c) is 60 days after the completion of the converter retrofit project (CRP).

(2) Copies of any Visible Emissions evaluations or records for which opacity was 4 percent or greater for the building housing the flash furnace, converters, and anode furnaces (to include date, time, and duration of the opacity);

(3) A description of any corrective actions taken to address the opacity from the building housing the flash furnace, converters, and anode furnaces (to include the date and time such actions were commenced and completed), along with a description of the cause of the opacity;

Exceedance(s) of 4% opacity limit applicable to visible emissions from the flash furnace, anode furnaces, and converter and not yet superseded by requirements related to the installation of the long-path optical density monitors:

N/A. Dependent upon CRP completion.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

(4) Dates, times, and duration of each bag leak detection system alarm sounding, the cause of the alarm and the date and time that ASARCO commenced investigation of the baghouse, and a description of the corrective actions taken, if any, along with the date and time such corrective actions were completed;

(5) The total alarm time for each bag leak detection system, as determined in accordance with subparagraph 26.a.v;

Total alarm time for each bag leak detection system:

The secondary hood baghouse the following alarm during the third quarter of 2018.

Date	Time of Alarm	Total Duration of Alarm (hours)	Module Number
8/24/2018	18:28 – 18:59	0.52	8

The anode baghouse had no alarms during the third quarter of 2018.

The furnace vent baghouse had no alarms during the third quarter of 2018.

Exceedance(s) of alarm limit of no more than 5% of total operating time in any 6-month period:

Secondary Hood Baghouse: April 1, 2018 – September 30, 2018	
Total duration of bag leak detection system alarm hours	0.52
Total hours of source operation	3960
Percent of time in alarm (operating hours)	0.013%

Anode Baghouse: April 1, 2018 – September 30, 2018	
Total duration of bag leak detection system alarm hours	0.04
Total hours of source operation	3690
Percent of time in alarm (operating hours)	0.001%

Furnace Vent Baghouse: April 1, 2018 – September 30, 2018	
Total duration of bag leak detection system alarm hours	1.27
Total hours of source operation	3960
Percent of time in alarm (operating hours)	0.00%

Note: The Hayden Smelter was down from March 10, 2018 through April 19, 2018 to tie in equipment relating to the CRP and annual maintenance activities. No processing equipment was operating during any of this time period. The alarm hours for the anode baghouse occurred during the second quarter of 2018. The alarms for the furnace vent baghouse were recorded during the second quarter of 2018 and were not true alarms as the new bag leak detection system was in the process of being calibrated.

Investigation(s), cause(s) and corrective action(s) taken:

August 29, 2018 was the first opportunity that presented itself, as this was a smelter maintenance down day, for the baghouse maintenance crew to fully inspect the secondary hood baghouse for any torn bags after the bag leak detection alarm. The maintenance crew did not find any bags that were in need of replacement during the inspection, and only noted that there were signs of rust and moisture inside the baghouse from recent rain events. No corrective actions were necessary.

(6) Dates, times, and duration of any instances where pressure drop or scrubber liquid flow rates were outside the established ranges for those parameters, the date and time that ASARCO initiated investigation, the readings at the time of the issue, a description of the underlying cause for those readings, and a description and explanation of any corrective actions, including the date and time that such actions were commenced and completed;

Hourly (block) average pressure drop(s) and liquid flow rate(s) outside range established in most recent Method 5 test:

The hourly block averages outside the established range(s) are detailed in the enclosed compact disk.

Investigation(s), cause(s) and corrective action(s) taken:

The investigation(s), cause(s) and corrective action(s) taken for each event are detailed in the enclosed compact disk.

Times scrubber(s) not in service or believed to be malfunctioning:

The times that the scrubber(s) were not in service or believed to be malfunctioning are detailed in the enclosed compact disk.

(7) Dates, times, and descriptions of deviations from the gas capture parametric monitoring requirements and/or limits of Paragraph 9;

PRIMARY HOODING PARAMETER:

Failure(s) to achieve minimum air infiltration ratio of 1:1 during blowing when improved hood is operational averaged over 24 blowing hours rolled hourly:

N/A. Dependent upon CRP completion.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

SECONDARY HOODING PARAMETER DURING BLOWING:

Failure(s) to achieve minimum exhaust rate of 35,000 SCFM at a converter averaged over 24 blowing hours rolled hourly, unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

SECONDARY HOODING PARAMETER DURING NON-BLOWING:

Failure(s) to achieve minimum exhaust rate of 133,000 SCFM at a converter averaged over 24 non-blowing hours rolled hourly, unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

SECONDARY HOODING PARAMETER WHEN HOOD DOORS ARE CLOSED:

Failure(s) to achieve minimum negative pressure drop across a hood of 0.03 mm of Hg (0.007 inches of water), unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

TERTIARY HOODING PARAMETER AT ALL TIMES MATERIAL IS PROCESSED IN COPPER CONVERTER DEPARTMENT:

Failure(s) to achieve minimum exhaust rate of 400,000 ACFM averaged over 24 hours of copper converter department material processing rolled hourly, unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

(8) Dates, times, and descriptions of deviations when ASARCO operated the furnaces, capture systems, baghouses, R&R Cottrell, or any other equipment in a manner inconsistent with the approved Operations and Maintenance Plan;

N/A. On March 20, 2018 Asarco received comments from EPA regarding the April 10, 2017 submitted Operation and Maintenance Plans. Asarco submitted the revised Operation and Maintenance Plans according the submittal schedule that Asarco and EPA agreed upon on May 3, 2018. The first submittal package was sent to EPA on May 4, 2018, the second submittal package was sent to EPA on June 1, 2018, and the last submittal package was sent to EPA on June 29, 2018.

(9) Dates, times, and descriptions of deviations when ASARCO's material handling was carried out in a manner inconsistent with the approved Operations and Maintenance Plan and/or Fugitive Dust Plan;

OPERATION AND MAINTENANCE PLAN

On March 20, 2018 Asarco received comments from EPA regarding the April 10, 2017 submitted Operation and Maintenance Plans. Asarco submitted the revised Operation and Maintenance Plans according the submittal schedule that Asarco and EPA agreed upon on May 3, 2018. The first submittal package was sent to EPA on May 4, 2018, the second submittal package was sent to EPA on June 1, 2018, and the last submittal package was sent to EPA on June 29, 2018.

FUGITIVE DUST CONTROL PLAN

On March 15, 2018 EPA approved of the submitted February 2, 2018 version of the Fugitive Dust Plan. Asarco began implementing the inspection forms as specified in the approved Fugitive Dust Plan and implementing the work practices as specified. The anemometer's data logger was connected to Asarco's DCS during the month of June 2018 and soon after the high wind event email notification system was implemented by the end of June 2018. Asarco's contractor installed the new water spray systems throughout the second quarter and completed all new water spray systems during the third quarter. All wind fence installations were completed in May 2018.

AJAX, Ltd. (AJAX) was selected to carry out the inactive facilities site and borrow material characterization and final site engineering for the Soil and Vegetative Cover Plans as specified in the approved Inactive Facilities Closure and Vegetation Plan. During the month of May 2018 samples were taken in each inactive facility and potential borrow material areas to better characterize the material present and inform the engineering designs. Once the lab results were received preliminary engineering began. In June initial plans to close the 82 Dam on the smelter lined impoundment were discussed with Arizona Department of Water Resources (ADWR) to incorporate their requirements for this facility in the final closure design plans.

Asarco and AJAX had several meetings to review and discuss the engineering designs and Soil and Vegetation Cover Plans for each of the three inactive facilities during the third quarter of 2018. Asarco is planning on submitting the final Soil and Vegetation Cover Plans during the month of October 2018 to EPA for review and approval.

Deviation(s) from material handling requirements of approved fugitive dust control plan and corrective action(s) taken:

See enclosed pdf titled "Fugitive Dust Plan Corrective Action 3Q2018."

Exceedance(s) of 15% Method 9 opacity limit on visible emissions from any source listed in the approved fugitive dust control plan (i.e., sources other than the furnaces and converter building) and corrective action(s) taken:

None during the third quarter of 2018.

Opacity readings outside major openings of secondary and tertiary crushers Total Enclosure or fine ore storage building in excess of minimum measurable opacity level over 6-minute period using long-path optical density monitors and corrective action(s) taken:

The open path opacity monitors were installed on August 10, 2018 at all four locations and the initial calibration was completed on August 14, 2018. On August 20, 2018 all four monitors were connected to the DCS. On August 20, 2018 instrument technicians checked the monitors located on both ends of the fine ore storage building as the monitors were not reading correctly due to alignment issues. Contractors were also in the process of adding bracing brackets to the instrument mounts to fix the alignment issues.

Since the mounting bracket was fixed the opacity monitors located at the fine ore storage building were still not measuring correctly. In September it was realized that direct sunlight was interfering with the monitor's measurements at the fine ore buildings. A shade cover was later installed to remedy interferences with sunlight. After this modification the two monitors at the fine ore storage building were still coming out of alignment every day. After further investigation it was discovered that as the fine ore storage building's structure shifted

throughout the day due to heat, vibration etc. and the monitors would come out of alignment giving false readings. A new mounting system that would not be connected to the fine ore building is currently in the process of being engineered and designed.

Event(s) when DCS system recorded data outside of established operational parameters, investigation(s), cause(s), corrective action(s), and degree of success:

Water Spray Systems Operational Parameters: See enclosed pdf titled "Fugitive Dust Plan – 3Q2018 Update" that includes an updated implementation schedule for the water spray systems. This is an update to the Fugitive Dust Plan Implementation Schedule that was submitted to EPA on September 14, 2018.

There were no recordings in the DCS for each water spray systems' pressure and flow rate prior to each connection/installation date noted in the pdf titled "Fugitive Dust Plan – 3Q2018 Update." Water spray system pressure and flow readings were recorded on the daily inspection forms prior to DCS connections for each system.

Camera Hill Meteorological Station Data & High Wind Events: See Excel spreadsheet titled "High Wind Events 3Q2018" which is enclosed with this report on a compact disc.

Acid Plant Scrubber Blowdown Solids Electric Dryer start/stop times: Currently being recorded in the DCS per fugitive dust plan requirements.

Concentrator Scrubber Parameters & Operational Run Times: See enclosed scrubber alarm report for the third quarter of 2018.

Refractory Brick Crusher Operational Parameters: The refractory brick crusher did not operate during the third quarter of 2018.

Dates and times when DCS system was not recording data:

There were no recordings in the DCS for each water spray systems' pressure and flow rate prior to each connection/installation date noted in the pdf titled "Fugitive Dust Plan – 3Q2018 Update." Water spray system pressure and flow readings were recorded on the daily inspection forms prior to DCS connections for each system.

The open path opacity monitors were installed on August 10, 2018 at all four locations and the initial calibration was completed on August 14, 2018. On August 20, 2018 all four monitors were connected to the DCS. On August 20, 2018 instrument technicians checked the monitors located on both ends of the fine ore storage building as the monitors were not reading correctly due to alignment issues. Contractors were also in the process of adding bracing brackets to the instrument mounts to fix the alignment issues.

Since the mounting bracket was fixed the opacity monitors located at the fine ore storage building were still not measuring correctly. In September it was realized that direct sunlight was interfering with the monitor's measurements at the fine ore buildings. A shade cover was later installed to remedy interferences with sunlight. After this modification the two monitors at the fine ore storage building were still coming out of alignment every day. After further investigation it was discovered that as the fine ore storage building's structure shifted throughout the day due to heat, vibration etc. and the monitors would come out of alignment giving false readings. A new mounting system that would not be connected to the fine ore building is currently in the process of being engineered and designed.

AMBIENT MONITORING NETWORK

Ambient monitoring network raw data and calculated ambient levels for the third quarter of 2018 are enclosed with this report on a compact disc.

(10) Dates, times, and descriptions (including emissions data) of any periods where ASARCO failed to meet an emission limit or an emissions control efficiency established under this Consent Decree;

ACID PLANT PM EMISSION LIMIT

Exceedance(s) of 6.2 mg/dscm limit as demonstrated through performance testing: None

SECONDARY HOOD BAGHOUSE EMISSION LIMIT

Exceedance(s) of 23 mg/dscm limit as demonstrated through performance testing and certified PM CEMS: None

ANODE FURNACE BAGHOUSE PM EMISSIONS LIMIT

Exceedance(s) of 23 mg/dscm limit as demonstrated through performance testing and certified PM CEMS: None

FURNACE VENT BAGHOUSE PM EMISSIONS LIMIT

Exceedance(s) of 23 mg/dscm limit as demonstrated through performance testing: None

COPPER CONCENTRATE DRYER PM EMISSIONS LIMIT

The copper concentrate dryer emissions are routed to the new furnace vent baghouse. See above section regarding the furnace vent baghouse PM Limit compliance.

FLASH FURNACE TAPPING/SKIMMING EMISSIONS CAPTURE SYSTEM PM EMISSIONS LIMIT

The flash furnace tapping/skimming emissions capture system is routed to the new furnace vent baghouse. See above section regarding the furnace vent baghouse PM Limit compliance.

PROCESS-WIDE TOTAL PM EMISSIONS LIMIT

The due date for beginning the use of a measuring system described in paragraph 24.a of the decree is June 1, 2019.

<u>Exceedances of 0.6 lb PM per ton of concentrate smelted total PM limit(s):</u>

N/A. Dependent upon CRP completion.

<u>Investigation(s), causes(s) and corrective action(s) taken:</u>

N/A. Dependent upon CRP completion.

DUCON-TYPE WET SCRUBBER OPERATIONAL REQUIREMENTS

Exceedance(s) of 0.05 g/dscm limit: None

DRY LIME SCRUBBING OF SO_2 ROUTED TO SECONDARY HOOD AND FURNACE VENT BAGHOUSES

Failure(s) to meet applicable control efficiency:

N/A. Dependent upon CRP completion.

Investigation(s), cause(s) and corrective action(s) taken or status of demonstration of technical infeasibility of control efficiency:

N/A. Dependent upon CRP completion.

CORRECTIVE ACTION TRIGGERS FOR ACID PLANT

Date	Time of Trigger Level Alarm	Cause and Corrective Actions Taken if Necessary
		No trigger levels were reached during the third quarter of 2018.

SO_2 EMISSIONS LIMIT FOR GASES COLLECTED FROM THE CONVERTERS

Exceedance(s) of applicable 650 ppmv limit for gases routed to acid plant or secondary hood baghouse or gases in the tertiary hood exhaust:

No exceedances of the 650 ppmv limit on the acid plant tail gas, secondary hood baghouse or the tertiary ventilation system occurred during the third quarter of 2018.

Investigation(s), cause(s) and corrective action(s) taken:

N/A.

(11) Dates, times and descriptions where ASARCO exceeded the Blowing rate limit set forth in Paragraph 8 and/or, for such time as the Blowing hour limit in Paragraph 8.b remains applicable, the Blowing hour limit;

Exceedance(s) of converter blowing limit of 32,000 SCFM averaged over 5 minutes of blowing and rolled each minute:

Date	Time	Converter Number	Cause
7/20/2018	13:27 – 13:31	5	Test roll in of converter and it was not processing copper. Not considered blowing activities per Consent Decree definition of "blowing."

TOTAL COMBINED BLOWING TIME OR SO_2 LIMIT ON ACID PLANT TAIL GAS

Exceedance(s) of total combined blowing time limit at all converters of 21 hours per 24-hour period rolled hourly, unless Asarco accepts 100 ppmv SO_2 limit on acid plant tail gas:

On September 4, 2018 between 4:00 am and 7:00 am the rolling 21-hour blowing limit was exceeded. A notification letter was submitted to EPA in accordance with the Consent Decree notification requirements on September 4, 2018.

Investigation(s), cause(s) and corrective action(s) taken:

The converters were shut down to bring the blowing hour limit back into compliance.

ii. Status and/or completion of construction or compliance milestones;

CONVERTER RETROFIT PROJECT

The construction of converter #3's hooding, mouth burner, flux feed system and other ancillary equipment tie-ins was continued during the third quarter. The start-up of converter #3 is scheduled for November 2018. See also the PowerPoint presentation titled "Hayden CRP 3Q2018 Status" for additional information.

R&R COTTRELL ESP REPLACEMENT BAGHOUSE

Completed.

DRY LIME SCRUBBING OF SO_2 ROUTED TO BAGHOUSES

Completed.

PREPARATION OF FUGITIVE EMISSIONS STUDY PROTOCOL

Completed.

IMPLEMENTATION OF APPROVED FUGITIVE EMISSIONS STUDY PROTOCOL

Asarco began the final planning and equipment siting efforts with SLR International Corp. for the implementation of the fugitive emissions study during the third quarter.

LONG-PATH OPTICAL DENSITY MONITORS SPECIFIED IN PROTOCOL

The due date for the installation of the three long-path optical density monitors at the building emission points specified in the fugitive emissions study protocol is 6 months after the completion of the initial fugitive emissions study.

iii. Status of PM CEMS installation and PS-11 testing pursuant to Paragraph 14;

On March 8, 2017 EPA approved of the March 3, 2017 revised Installation, Certification and QA/QC Protocol for the PM CEMS. From May 8-12, 2017, the initial PS11 correlation testing was performed on the anode baghouse PM CEMS and the testing report was submitted on July 18, 2017. The SICK light scatter PM CEM was successfully certified and the Altech beta

attenuation PM CEM was not successfully certified. On September 6, 2017, a revised PS11 Certification testing protocol for the Altech beta attenuation PM CEM located at the anode baghouse was submitted to EPA for review and approval. A conference call was held on October 3, 2017 between Asarco, EPA, and Asarco's PM CEMS vendors to answer EPA's questions on the September 6, 2017 revised PS11 Certification Protocol. Additionally, the PS11 certification re-test for the Altech beta-attenuation monitor occurred during the week of October 30, 2017. The results of the Altech beta-attenuation monitor showed that it passed the second round of PS11 correlation testing and the report was submitted to EPA on January 22, 2018. Additionally, Asarco notified EPA in the report cover letter dated January 22, 2018, that the Altech beta-attenuation monitor would be relocated to the new furnace vent baghouse during the March 2018 plant wide outage. The Altech beta-attenuation monitor was successfully relocated to the outlet of the furnace ventilation baghouse.

The PM CEMS located at the secondary hood baghouse and the acid plant tail gas stream were installed during the month of August 2017. The initial PS11 correlation testing for these two PM CEMS occurred during the weeks of October 2 – 13, 2017. The SICK light scatter monitor located on the secondary hood baghouse passed the initial PS11 correlation testing and the acid plant Altech beta-attenuation monitor did not pass the initial PS11 correlation testing. The reports for these tests were submitted to EPA on January 22, 2018. On March 2, 2018 Asarco submitted a protocol for the re-test of the acid plant Altech beta-attenuation monitor to EPA to review and approve. On March 14, 2018 EPA sent comments on the protocol and Asarco incorporated those changes in a revised testing protocol that was submitted to EPA on March 22, 2018. On March 29, 2018 EPA approved of the March 22, 2018 revised Acid Plant re-test protocol. The PS11 certification re-test occurred from June 4-8, 2018. On August 28, 2018 Asarco submitted the PS11 re-test report to EPA and informed that the Acid Plant beta-attenuation PM CEM did not certify. Asarco is currently working on creating a plan to utilize this monitor as a continuous parametric monitoring system (CPMS) and will submit to EPA for approval.

On March 16, 2018 Asarco submitted the new furnace vent baghouse and tertiary ventilation system's PM CEMS Installation, Certification, and QA/QC Protocol to EPA for review and approval. On March 22, 2018 EPA submitted its comments on the March 16, 2018 protocol and Asarco revised the protocol accordingly and submitted to EPA for approval on April 3, 2018. On April 6, 2018 EPA approved of the revised protocol. The initial PS11 correlation testing for the PM CEMS located on the tertiary ventilation system and furnace vent baghouse was conducted from July 9 – 20, 2018. Asarco has not received the results of this testing as of September 30, 2018.

iv. Problems encountered or anticipated with Consent Decree compliance, together with implemented or proposed solutions;

None

v. Status of any permit applications pertaining to any of the requirements of this Consent Decree;

On May 5, 2017 Asarco submitted its replacement Title V Air Quality Control Permit Renewal application incorporating all of Paragraph 101 permitting requirements from the Consent Decree, and on May 12, 2017 Asarco submitted a copy of that permit application to the Paragraph 117 list of addressees as required. On June 23, 2017 Asarco submitted a revision to the May 5, 2017 Title V Air Quality Permit Renewal Application to ADEQ, and on June 26, 2017 Asarco submitted a copy of those revisions to the Paragraph 117 list of addressees as required. Asarco and ADEQ have regularly scheduled conference calls to facilitate the permitting process.

On September 26, 2017, Asarco submitted a letter to EPA requesting clarification on the inclusion of the Fugitive Dust Plan into the Renewal Title V Air Permit. On December 19, 2017 Asarco received a clarification letter from EPA on how best to incorporate the Fugitive Dust Plan provisions in the Title V Renewal Air Permit. On December 27, 2017 Asarco submitted a revision to the May 5, 2017 Title V Air Quality Permit Renewal Application to ADEQ, and Asarco submitted a copy of those revisions to the Paragraph 117 list of addressees as required on that same day. ADEQ held a 30-day public comment for the Hayden Operation's Renewal Title V Air Quality Permit No. 39948 which began on January 10, 2018 and ended February 8, 2018. A public hearing was also held on February 8, 2018.

ADEQ addressed all public comments received and revised the draft renewal permit accordingly and submitted to EPA for review. ADEQ received some comments from the EPA on February 23, 2018 and addressed those comments accordingly. On March 14, 2018 ADEQ submitted the final draft permit to EPA for approval. On March 23, 2018 ADEQ issued a letter granting the Hayden Operation's Title V Renewal Air Quality Permit No. 39948. The Hayden Operation's Title V Renewal Air Quality Permit No. 39948 was issued by ADEQ on April 20, 2018.

vi. The status of the SEP under Section VIII and Appendix C including, at a minimum, a narrative description of activities undertaken; and

On March 13, 2018 an order was placed for the new diesel-electric switch locomotive. On May 31, 2018 the new diesel electric switch locomotive was delivered on-site. The due date for purchasing and operating the new diesel-electric switch locomotive is December 30, 2018.

vii. The status of the Environmental Mitigation Projects under Section VII and Appendix A including, at a minimum, a narrative description of activities undertaken; status of Environmental Mitigation Project milestones set forth in Appendix A; and a summary of costs incurred since the previous report.

PINAL COUNTY ROAD PAVING ENVIRONMENTAL MITIGATION PROJECT

To date Asarco has submitted a total of $6,000,000 to Pinal County for this project. As of June 30, 2018, the County has spent $5,892,746.85 on the project.

The project was deemed complete by EPA on March 1, 2018 when EPA advised that the $107,253.15 left over project money would be used for future maintenance of the newly paved Camino Rio Road. Asarco submitted the final project report to EPA on April 12, 2018 and EPA submitted comments on this report to Asarco on May 16, 2018. Asarco incorporated EPA's comments and submitted the revised project report to EPA on May 17, 2018. On June 7, 2018 EPA approved of the revised final project report.

LEAD-BASED PAINT ABATEMENT ENVIRONMENTAL MITIGATION PROJECT

On January 10, 2018 EPA approved of the December 14, 2017 version of the Lead Based Paint Abatement Project Plan. Asarco and CAG established a special escrow account with a bank for this project on April 19, 2018. The $2 million project funds were transferred into the escrow account on April 20, 2018. CAG has withdrawn $30,220.00 for the project as of September 30, 2018.

The contract with Adams & Wendt (A&W) was finalized in the third quarter of 2018 and the procurement process for abatement firms began as well. CAG continued to adverse to the Hayden and Winkelmann communities about the project to generate interest and start testing

residences. See enclosed pdf document titled "Lead Paint Abatement Project Progress Report 3Q2018" for additional details.

55.b Description of any non-compliance with the requirements of this Consent Decree, including those identified in Paragraph 55.a.i and an explanation of the violation's likely cause and the remedial steps taken, to be taken, to prevent or minimize such violation.

On September 4, 2018 Asarco submitted an operating limit exceedance notification to the EPA. The notification stated that on September 4, 2018 between 4:00 am and 7:00 am the rolling twenty-one (21) hour Blowing limit as specified in Paragraph 8.b was exceeded, and the converter operations were subsequently shut down to bring the Blowing hour limit back into compliance.

On July 5, 2018 Asarco notified the EPA that the water spray system installation and automation project would not be completed within the 120 day timeframe as specified in the Fugitive Dust Plan and Consent Decree. On July 11, 2018 Asarco submitted the expected completion schedule for the remaining installation and automation components of the Fugitive Dust Plan. On August 3, 2018 Asarco submitted an update on the progress towards completing the outstanding installation and automation components of the Fugitive Dust Plan. On September 14, 2018 Asarco submitted another update on the progress towards completing the outstanding installation and automation components of the Fugitive Dust Plan. See enclosed pdf titled "Fugitive Dust Plan Schedule – 3Q2018 Update" for additional information.

PARAGRAPH 58. REPORT CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Joseph A. Wilhelm
General Manager
Hayden Operations

JAW/rcg

Enclosure